



COUNCIL OF CAPITAL CITY LORD MAYORS

Submission: National Electric Vehicle Strategy

31 October 2022



Introduction

The Council of Capital City Lord Mayors (CCCLM) appreciates the opportunity of submitting the following to the National Electric Vehicle Strategy consultation paper.

The CCCLM consists of the Lord Mayors of Adelaide, Brisbane, Darwin, Hobart, Melbourne, Perth and Sydney, and the Chief Minister of the ACT. Together, we call on the Australian Government to coordinate and facilitate opportunities that contribute towards emissions reductions in cities, including electrification of transport, removal of barriers and provision of incentives for the take-up of electric vehicles.

Australia's capital cities account for 70 per cent of the GDP and are the place of employment for more than 9 million Australians, and 2.3 million Australian businesses. As one of the world's most urbanised nations, Australia's capital cities are instrumental to the implementation of climate, transport and energy reform.

Stronger action on addressing transport related emissions is essential. Growth in the Australian road transport task has led to increased fuel consumption and an increase in greenhouse gas emissions. Motor vehicle exhausts also produce greenhouse gases that contribute to climate change. The main greenhouse gas produced by vehicles is carbon dioxide (CO₂), but they also produce nitrous oxide and methane. Light vehicles account for around 11 per cent of Australia's greenhouse gas emissions¹.

Whilst we acknowledge and welcome the policy direction on electric cars, this should be complementary to transport planning that seeks to shift reliance on private single occupancy vehicles and commuting mode-share to public transport and support active transport, reducing reliance on cars for inner city residents. Examples of these types of policy and infrastructure directions include transport-oriented development, walkable and rideable cities, separated cycleways, limits to car spaces in new developments, and encouraging car sharing schemes.

We therefore welcome the Albanese Government's consultation and aspirations of providing Australians with better access to clean modern road transport technology and ensure infrastructure and industries are coordinated in supporting this transition.

Capital city governments are a critical partner in encouraging national electric vehicle (EV) uptake and emissions reductions and stand ready to act as a major partner in responding to the climate challenge.

Basil Zempilas
Lord Mayor of Perth
Chair
Council of Capital City Lord Mayors

¹ [Vehicle emissions | Green Vehicle Guide](#)

Submission

The CCCLM supports the principles outlined by the National Electric Vehicle Strategy consultation paper:

- Build on the strong platform that governments and industry have already started
- Deliver a nationally consistent, comprehensive and overarching framework
- Enhance existing actions to ensure greater alignment to the Strategy
- Raise the pace and scale of change
- Address national gaps so all Australians can access the benefits of EVs
- Be dynamic and adapt over time to reflect the rapidly evolving nature of the sector
- Make sure we are on track to meet our emissions and transport electrification goals and proposed objectives.

And welcomes the commitment made to consider:

- Further measures to increase EV sales and infrastructure
- Policy settings to encourage Australian manufacturing of EVs, chargers and components
- Ways to address the implications of future declining fuel excise revenue.

We are encouraged by the Australian Government's commitment to delivering a \$500 million Driving the Nation Fund aimed at creating a national EV charging network and investment in hydrogen highways for heavy transport. Local government would benefit from a national program that supports the delivery of electric public transport systems.

Financial support from the Driving the Nation Fund within capital cities will enable city councils to overcome technical and commercial barriers that prevent further uptake of electric fleets. CCCLM would welcome the opportunity of partnering with the Australian Renewable Energy Agency (ARENA) to ensure that efforts in our cities are not duplicated.

Most recently as part of the CCCLM pre-budget submission for FY2021-22, CCCLM recommended the Australian Government focus on the following transport specific initiatives:

- Facilitate opportunities that reduce emissions in cities, including electrification of transport and incentives for take-up of active travel. For example, tax incentives could be applied leading to increased participation in active travel and take-up of electric vehicles.
- Create a program that provides incentives for the delivery of fully electric public transport systems and electric vehicle charging infrastructure.

The CCCLM supports the phasing in of fuel efficiency standards to reach zero emissions and to phase out tax deductions for liquid fuels.

Table 1 below provides the CCCLM response to the specific questions within the Australian Government's National Electric Vehicle Strategy consultation paper.

Response to the National Electric Vehicle Strategy's goals, objectives and actions

Priority areas and actions

CCCLM comment and recommendations

Strategy framework

Objectives

- | | |
|---|--|
| <p>1. Do you agree with the objectives, and do you think they will achieve our proposed goals? Are there other objectives we should consider?</p> | <p>The CCCLM welcomes and agrees with the objectives outlined in this consultation paper.</p> <ul style="list-style-type: none">• The goal of 'reduce emissions' should be inclusive of noxious air pollutant emissions, not just carbon emissions. This would recognise the significant contribution of vehicle pollutants and the importance of low-emission vehicles to improving community health outcomes.• Cities are where the majority of vehicles are garaged but average trip distances travelled are lowest. Therefore, city-focused programs will help accelerate the transition. In cities the challenge will be ensuring that supporting EV infrastructure is installed in a co-ordinated and customer focussed manner to ensure access for all (including residents who rent or do not have access to off-street EV charging infrastructure). Providing consistency in standards and regulations would support integration, buying power and support industry• The goal regarding reducing greenhouse gas emissions should be defined as an emission-reduction target to demonstrate how EVs will contribute to meet national greenhouse gas reduction commitments.• The Strategy should focus on unlocking/securing those supply chains where the technology already exists while balancing the need to safeguard against future technology developments and achieve sustainable outcomes in the long term. |
|---|--|

Actions

- | | |
|--|--|
| <p>2. What are the implications if other countries accelerate EV uptake faster than Australia?</p> | <ul style="list-style-type: none">• Other countries have already accelerated their uptake of EVs. Australia should be assessing and learning from international experiences. Australia needs to address its EV policy and supply issues, whilst also keeping up with innovation and trends overseas.• A strong and fast-tracked fuel efficiency goal will result in better vehicle model availability in Australia and avoid our fleet falling further behind international benchmarks, whilst ensuring EVs are increasingly competitive with combustion engine vehicles. |
|--|--|

- Australia may miss the opportunity to be a competitive designer and manufacturer within the EV and EV infrastructure supply chain. This could result in less local investment and fewer local green manufacturing jobs, as well as Australian resources moving overseas to return as value-added products therefore increasing emissions associated with manufacturing.
- If Australia is slow to transition, there is a risk that we could become a dumping ground for low quality, poorly performing internal combustion engine vehicles.

3. What are suitable indicators to measure if we are on track to achieve our goals and objectives?

Indicators to use include:

- Demand and supply being met and supported by appropriate infrastructure.
- Number of EV models available in each vehicle class.
- Percentage of households with convenient access to vehicle charging – within 10km of their home.
- Proportion of major national highways with EV fast charging infrastructure at 100km intervals. This indicator aligns with the NSW Government’s EV strategy for public charging network actions².
- Establishing a network of fast-charging stations on, or in proximity to, national highways will help to overcome the ‘access to charging’ barrier and reduce consumer anxiety about EV range.
- Percentage of population within 10km of fast-charging network.
- Emissions inventory for noxious emissions and greenhouse gas emissions of the national vehicle fleet to track improvements.
- EV sales as percent of annual sales.
- EV ownership as percent of vehicle population, and extract each category of vehicle (e.g., light passenger, light commercial and heavy vehicles). This would allow measurement of the different pace in transition between categories.
- EV public buses as percent of total bus fleet.
- It would be beneficial to track progress.

What more can we do to meet our goals and objectives

Encourage rapid increase of demand for EVs

4. Are there other measures by governments and industry that could increase affordability and accessibility of EVs to help drive demand?

- Encouraging “back to base” fleet charging infrastructure by supporting organisations with commercial fleets to undertake charging installation projects, including necessary electrical upgrades (such as three phase power).
- Vehicle to grid, vehicle to home, vehicle to building and other local energy use or wider system service be also encouraged and integrated as part of fleet infrastructure installation.
- Government incentives or subsidies to assist in retrofitting EV chargers in houses and apartment buildings will enable all Australians to own an EV, regardless of building ownership.

² <https://www.energy.nsw.gov.au/nsw-plans-and-progress/government-strategies-and-frameworks/electric-vehicle-strategy>

- Incentivising corporate and hire car fleets will increase exposure to the technology and provide supply into the secondary market
 - Demonstration hydrogen refuelling stations are supported, and CCCLM recommends that a public transport agency be actively encouraged to apply for ARENA funding to explore an urban demonstration hydrogen refuelling station and vehicle (e.g., bus).
 - In addition, the CCCLM recommends that support be available to local government fleet and support services (e.g., waste trucks, heavy utility vehicles) which would provide additional educational and promotional opportunities of hydrogen and electric vehicles in the community at large.
 - Implementation scale for heavy road freight should be a sectoral “transition” rather than “trial”. The CCCLM supports hydrogen infrastructure for heavy vehicles but setting minimum efficiency standards will have a more immediate impact, as many vehicles entering Australia use more fuel.³
 - Reduce barriers to innovative charging infrastructure e.g., smart poles, embedded kerbside electric vehicle charging where homes do not have private off-street parking, where appropriate in the local context.
 - Investigations and research into zero carbon precinct/low emissions zones in an Australian context.
 - Support commercialisation of innovative opportunities to provide EV charging as a service.
 - A per kilometre road user charge, applied specifically to EVs and exempting internal combustion engines (ICE) vehicles, would currently function as a disincentive to EV take-up. In the future however, when EV take-up is more significant and EVs represent a higher percentage of new vehicle sales, then road user charging will be an important area of reform to ensure the fairness and sustainability of our road system.
 - In addition, the treatment of hybrid vehicles needs to be considered with future road user charging mechanisms.
5. Over what timeframe should we be incentivising low emission vehicles as we transition to zero emission vehicles?
- The incentive is needed most in the initial stages when take-up of EVs is still low, but as the rate of take-up increases, the incentives can be scaled back.
6. What information could help increase demand and is Government or industry best placed to inform Australians about EVs?
- Public education to debunk myths about batteries, range, power, affordability, vehicle class availability.
 - Provide information on EV and EV charger safety aspects and hazard management.
 - Provide information to assist the public to identify:
 - the correct EV for their usage (what to consider when you buy/retrofit);
 - understand the lifecycle savings (energy costs, maintenance, insurance, registration and emissions); and

³ [Heavy Vehicle Emission Standards for Cleaner Air](#) – Department of Infrastructure, Regional Development and Communications, October 2020

- where to go for favourable financing and grants.
- Provide consistent signage and where possible consistent customer information and experience across EV charging station types.
- The ACT Government has established a Business Fleet Advisory Service⁴ to support Canberra businesses and community organisations in transitioning their fleets to zero emissions vehicles (ZEVs). The Business Fleet Advisory Service provides businesses and community organisations with independent, accurate and targeted advice to support the electrification of their fleets. Key information provided includes:
 - Procurement advice and assistance with business case development;
 - Guidance on EV charging and infrastructure requirements;
 - Vehicle total cost of ownership (TCO) calculation;
 - Fleet data collection and tracking; and
 - EV purchasing and leasing solutions.

Increase supply of affordable and accessible EVs to meet demand across all segments

7. Are vehicle fuel efficiency standards an effective mechanism to reduce passenger and light commercial fleet emissions?

Australia is the only OECD country without fuel efficiency standards.

In 2017, the average combined CO₂ emissions for a new light vehicle sold in Australia was 182 grams per kilometre (g/km). A National Transport Commission study estimated that if Australian consumers purchased vehicles with best-in-class emissions, national average CO₂ emissions for new light vehicles would be over 50 per cent lower. On a grams-of-CO₂ per kilometre basis, official figures⁵ reveal that Australian vehicles emit about 50% more than the equivalent vehicle category in Japan, for the EU, it is 45% and the USA puts out 20% less CO₂ than Australian vehicles.

Adoption of vehicle efficiency standards will:

- reduce GHG emissions, improve air quality, liveability and public health in Australian communities.
- increase industry certainty about performance requirements in the Australian market, removing the disadvantage for manufacturers importing low and zero emission vehicles. In turn, this could increase consumer choice and quality.
- influence community perceptions and support demand for manufacturers to import vehicles that offer low or zero emission options, including electric vehicles.
- prevent manufacturers disposing of stock in Australia that they can no longer sell in other markets where standards prevail.
- encourage manufacturers to bring forward new model release dates to the Australian market.

⁴ [Business Fleet Advisory Service - Climate Choices \(act.gov.au\)](https://www.act.gov.au/business-fleet-advisory-service)

⁵ [Real-World CO₂ Emissions Performance of the Australian New Passenger Vehicle Fleet 2008-2018](#)

- Save businesses and consumers significantly on the costs of running a vehicle.
- New vehicles in the ACT are subject to the Vehicle Emission Reduction Scheme – an environmental initiative of the ACT Government aimed at reducing CO₂ emissions emitted by the transport sector. It provides financial incentives on the motor vehicle duty paid for those people purchasing vehicles with lower operating emissions. The scheme uses the Australian Governments Green Vehicle Guide which sets out the CO₂ emissions for different vehicles. Increased fuel efficiency standards would also offer the Australian Government the opportunity to incentivise electric vehicles and other zero emissions vehicles without a direct cost to the Commonwealth (or to the states).
- CCCLM recommends that Australia immediately develop and implement emissions-reduction standards and policy regulations to increase fuel efficiency to reduce GHG emissions from all new on-road vehicles. CCCLM also recommends that goals and targets are set to underpin interrelated federal policies and strategies, such as setting interim national EV sales target.
- Introduction of fuel-efficiency standards should go hand-in-hand with noxious pollutant emission standards. Australia needs to harmonise with the Euro 6 and Euro VI standards for all emissions across all vehicle classes to mitigate health impacts, which is already 8–10 years behind its adoption in Europe. With recent improvements in fuel quality in Australia, there is no technology barrier to the introduction of Euro 6 and Euro VI standards.

8. Would vehicle fuel efficiency standards incentivise global manufacturers to send EVs and lower emission vehicles to Australia?

- Currently, vehicle manufacturers have indicated that they supply EVs to meet overseas regulatory requirements as a priority. Bringing Australia in line with international standards would improve the choice and availability of vehicles in Australia. This would increase EV demand globally and drive prices down.

9. In addition to vehicle fuel efficiency standards for passenger and light commercial vehicles, would vehicle fuel efficiency standards be an appropriate mechanism to increase the supply of heavy vehicle classes to Australia?

Vehicle fuel efficiency standards will support local governments to address the main barriers to adopting zero emissions heavy vehicles, which include:

- Limited choice of available EV models, particularly for specialised uses
- Cost burden of heavy electric vehicles against ICE vehicles
- Cost of supporting infrastructure for vehicle charging and electricity distribution
- Fuel efficiency standards would assist as an incentive but need to be complemented by research and development incentives into different alternative fuels, as it is recognised that there are technological limitations for electric heavy vehicles such as the weight of the battery.
- Fuel efficiency standards for heavy vehicles should be jointly applied with adoption of Euro VI noxious emission standards.

10. What design features should the Government consider in more detail for vehicle fuel efficiency standards, including level of ambition, who they should apply

to, commencement date, penalties and enforcement?

11. What policies and/or industry actions could complement vehicle fuel efficiency standards to help increase supply of EVs to Australia and electrify the Australian fleet?

CCCLM recommends

- Understanding the ideal public charging levels to support EV uptake (the scale of when and where battery electric vehicle fleet market penetration is most likely to develop), as well as connecting public EV charging infrastructure to source its electricity from renewable sources where possible.
- Investigate market practicality and business case of EV/hydrogen charging infrastructure on major routes between capital cities, especially for large freight vehicles.
- Engaging with local government on the rollout of national road signage standards, charging infrastructure installation guidance, and interoperable data and payment standards.
- Ensuring that new residential buildings have EV charging plugs available from first occupancy, removing barriers to retrofitting EV chargers particularly for tenants. This can leverage recent changes to the National Construction Code for EV charging infrastructure.
- Light commercial vehicles contribute a high proportion of urban air pollutants, requiring a targeted strategy to address emissions from this sector. Fuel efficiency standards on their own may not achieve the objectives without a strategy for increasing turn-over of the light commercial fleet and retiring high-polluters. Incentives to replace older, polluting vehicles with a low- or zero-emission vehicle should be considered.

12. Do we need different measures to ensure all segments of the road transport sector are able to reduce emissions and, if so, what government and industry measures might well support the uptake of electric bikes, micro-mobility and motorbikes?

- There will be different measures to enable all segments of the road industry to reduce emissions.
- Public transport systems require significant investment in charging or refuelling technology as well as the vehicles, to be able to provide a reliable and efficient transport solution. Direct funding support for the transition of public transport systems needs to be prioritised to rapidly reduce the net emissions and encourage more sustainable forms of transport in cities.
- The transition in public transport systems includes investment in not only the infrastructure at site but also in the electricity transmission and distribution networks to ensure low carbon electricity is available at site. This will require funding, co-ordination and approvals to ensure its timely delivery. In addition, transitioning the public transport fleet vehicles presents the potential for procurement/demand spikes greater than the supply capacity to meet fleet targets [for example, Queensland and NSW state-level bus transition targets]. Co-ordination may be of benefit to ensure jurisdictions are not unnecessarily competing against each other and thus forcing up the cost of transition.
- The inland rail and other freight alternatives require a plan and targets for reducing traditional truck freight.
- Installation of EV charging in residential buildings can facilitate the use of electric bikes, micro-mobility, and motorbikes in addition to EVs.

- To support the uptake of personal mobility devices such as electric bikes and e-scooters, governments should invest in appropriate infrastructure and regulation to maximise the safety of such devices and therefore increase community confidence in them as valid transport choices. Local Government can facilitate delivery through urban planning and building codes as well as community engagement.

13. How could we best increase the number of affordable second hand EVs?

- In addition to electrification of the Australian Government fleet, support should also be provided to corporate and hire car fleets to transition first and create a significant and more affordable second hand market.
- Brisbane City Council has approximately 400 passenger vehicles. However, support for transition requires priority infrastructure as much as vehicle-based incentives. There needs to be incentives for both landlords and Distributed Network Service Providers (DNSPs) to deliver and facilitate upgrades rather than present barriers.

14. Should the Government consider ways to increase the supply of second hand EVs independently imported to the Australian market? Could the safety and consumer risks of this approach be mitigated?

- Capital city governments would support means to increase the supply of second hand EVs into the Australian market as this would increase affordability and accelerate take-up.
- Consideration should be given to verifying EV battery life and recycling options.
- Consideration should also be given regulatory framework for second hand EVs that mitigates risks and ensure vehicle standards are complied with and vehicles are free from damage and fire risk.

Strengthen Australia's competitive in the EV Value Chain

15. What actions can governments and industry take to strengthen our competitiveness and innovate across the full lifecycle of the EV value chain?

- Support technologies that effectively manage and undertake resource recovery of retired EV batteries.
- Create nationally consistent training and education/qualifications to support employees working across jurisdictions.

Establish the systems and infrastructure to enable rapid uptake of EVs

18. Are there other proposals that could help drive demand for EVs and provide a revenue source to help fund road infrastructure?

- Federal taxes like the Luxury Car Tax (LCT), Fuel Excise, Fringe Benefits Tax (FBT) and Goods and Services Tax (GST); state charges like Stamp Duty, Registration and local fees including parking permits and charges add to vehicle ownership costs.
- The largest contributor to road-related revenue is the Australian Government's fuel excise. After allowing for estimated Fuel Tax Credits, the net gain to the underlying cash balance from the fuel tax system is expected to be \$11.4 billion in 2020-21. CCCLM recognises that this revenue could be generated over time from other sectors and technologies, but it is an accepted principle that road users should pay for the benefits of using the road network.
- A nationally coordinated and consistent approach for short-term exemptions from some or all these taxes, duties and fees will accelerate the uptake of electric vehicles as prices fall.

- At the November 2019 Infrastructure and Transport Ministers Meeting, Ministers committed to consider the revenue implications of new technology vehicles. The Australian Government should continue to work collaboratively with jurisdictions on this matter.
- The Australian Government should look to a phased introduction of road user pricing to EV's in a similar way to that which is being implemented by the NSW Government, which will only be addressed once the EV market is established and will not undermine support in the early years.
- The amount of tax credits from the fuel tax system is approximate to the annual amount of fossil fuel subsidies in Australia⁶. These subsidies should be phased down to provide funding to incentivise EVs and substitute declining fuel tax receipts.
- Further, the Australian Government may work with States and Territories to implement a nationally consistent tiered mining royalties' scheme⁷ that taxes resource companies based on windfall profits. A similar scheme was recently introduced by the Queensland Government.
- Both proposals would provide significant amounts of funding to support electric vehicles and associated infrastructure without increasing costs to customers or adding to domestic inflation. It is also a way for sub national governments to fairly finance climate resilience and net zero in a way that does not diminish intergenerational equity.

19. What more needs to be done nationally to ensure we deliver a nationally comprehensive framework for EVs?

- A national community education campaign would help to alleviate concerns about EVs, especially range anxiety. Promotion of the 'top-up' mindset will help promote smaller cars that are fit for most purposes and less expensive.
- It is recommended that more public chargers across metropolitan, regional and rural Australia to fill 'charging blackspots' and battery electric vehicle charging stations powered by renewable energy along Australia's national highways are installed.
- The private realm is also generally a 'blackspot', and there is an urgent need to facilitate electric vehicle charging in the private realm, particularly in multi-unit residential and commercial buildings, and in urban renewal precincts. The National Construction Code 2022 ensures that new residential apartment buildings include infrastructure for future EV chargers, but this needs to be pushed further to ensure that EV charging plugs (whether a general power outlet or specialised charger) are available from the first occupancy of the building, and in sufficient number to meet future needs of the building. This may be achieved through local government planning schemes or incentives. EV chargers need to be available to all residents, whether owners or tenants, to avoid inequitable access to EV infrastructure.
- Practical guidance material and funding to facilitate retrofitting of EV charging infrastructure is critical to ensuring that all Australians have access to EVs at their residence. The NSW Government has developed guidance for strata buildings that could be used as a starting point for that sector.

⁶ <https://australiainstitute.org.au/post/australian-fossil-fuel-subsidies-surge-to-11-6-billion-in-2021-22/>

⁷ <https://amp.theguardian.com/australia-news/2022/sep/21/massive-missed-opportunity-nsw-could-make-23bn-with-tiered-tax-on-record-coal-profits>

- Motorists expect convenient access to recharging facilities for their vehicles, and access to infrastructure is expected to build consumer and business confidence in investing in ZEVs.
- CCCLM recommends that 'blackspot locations' are identified according to cross-spatial user-types (central business districts and suburban areas, including under-served areas such as high density living, older apartments, as well as business fleet, freight and delivery, tourism, public transport and taxi and shared transit).
- In the urban context, CCCLM recommends that high density living, commercial urban delivery, public transport, point-to-point and rideshare vehicles are considered blackspots for high priority charging and refuelling funding.
- For CBDs, publicly accessible vehicle charging is supported to assist the transition to electric vehicles, however, it must be done in ways which limits the impact on streets and public space. This will typically mean locating charging stations in publicly accessible parking areas rather than on street.
- For local government, the biggest barriers to installing new charging or refuelling infrastructure is technical expertise requirements that are needed to understand the development and design of adaptable charging infrastructure, as well as securing funding for electrical upgrades in buildings.
- A coordinated timeline for hydrogen vehicles, hydrogen production and retail availability of hydrogen to allow for informed purchasing where EV charging is not viable.
- Collaboration with electricity distribution networks to optimise the charging patterns so they best support a majority renewable electricity supply, e.g., charging at times of high solar production, ability to use demand management and other emerging smart grid solutions.

20. How can we best make sure all Australians get access to the opportunities and benefits from the transition?

Opportunities for EV transition include:

- Encourage fleet transitions to provide supply for a second-hand EV market.
- Ensure access to public fast charging infrastructure and residential charging infrastructure.
- Ensure manufacturers supply vehicles that are suitable for all uses, such as utility vehicles, towing and specialised fitouts.
- Introduce fuel efficiency standards to:
 - reduce emissions and lower running costs;
 - improve public health; and
 - expand model availability and affordability in the Australian market.